

# KENWOOD

Listen to the Future



## TK-2312/3312

VHF/UHF FM Portable Radios



FleetSync<sup>®</sup>  
by KENWOOD

The TK-2312/3312 is compact yet packed with features for intuitive operation, impressive performance, and all-weather reliability. Nine programmable function keys allow for customized convenience, and Kenwood's renowned audio clarity means the message gets through loud and clear.

### UHF WIDE BAND COVERAGE

Offering extensive frequency coverage – 70MHz for UHF – the TK-2312/3312 is ideal for a wide range of applications.

### 128 CHANNELS / 128 ZONES

The 128-channel, 128-zone capacity is ample for any current or future requirement in any radio system.

### EASY OPERATION

Seven frontal PF keys provide easy one-touch operation. And the 8-character, 13-segment backlit LCD with icons – including a new RSSI display – makes channel information or FleetSync<sup>®</sup> messaging easy to read, day or night.

### 4-COLOR LED INDICATOR

In addition to the red/orange/green LED indicators, a blue LED has been added for quick visual confirmation.

### PROGRAMMABLE VOICE SCRAMBLER\*

The built-in programmable voice scrambler provides protection against casual eavesdropping.

\*This function cannot be used in certain countries. Please contact your Kenwood dealer or further information.

### SIGNALING

■ QT / DQT / DTMF   ■ FleetSync<sup>®</sup> PTT ID, SelCall  
■ 2-tone (encode/decode)   ■ Built-in MDC-1200 signaling

FleetSync<sup>®</sup> and MDC-1200 signaling can be independently selected for each zone. Switching between them is as simple as changing zones.

### EMERGENCY FUNCTION

For hazardous/hostile environments, the AUX key can be programmed for Emergency use to transmit an alert to a predetermined person or group using DTMF, FleetSync<sup>®</sup> or MDC-1200 signaling.

### ROBUST & WATER-RESISTANT

The TK-2312/3312 has passed the demanding IP54/55 tests, even with the optional speaker microphone KMC-45 attached (locking bracket required). It also meets or exceeds 11 MIL-STD 810 C/D/E/F environmental standards, including "blowing rain".

### CLEAR & CRISP, ENHANCED AUDIO

As an experienced audio specialist, Kenwood has decades of expertise that is reflected in every Kenwood radio – from component selection and construction to optimization, evaluation and analysis. The resulting audio performance, specially engineered for transceivers, is undeniably clearer and crisper. Just listen to the difference.

### 5W OUTPUT POWER

Output is 5W for both VHF and UHF.

### GPS CONNECTIVITY

The KMC-48GPS Speaker Microphone provides an option for GPS tracking.

### 9 PF KEYS

9 programmable functions keys (7 in the front and 2 on the side) allow operation to be customized to fit specific requirements. A PF key can be programmed as an Emergency function to send a help signal to a predetermined person or group, using DTMF, FleetSync<sup>®</sup>, 5-tone or MDC-1200 signaling.

### OTHER FEATURES

- Radio stun
- Priority scan
- Speaker mute
- Channel / Zone delete & add
- Key lock
- Compander / VOX / Scrambler setting per channel
- VOX
- T.O.T
- Busy channel lockout
- Operator-selectable tone
- Password protection
- Wireless clone
- Self-programming mode
- Voice announcement



## Options

**KNB-45L**  
Li-Ion Battery Pack  
(2,000 mAh)



**KNB-53N**  
Ni-MH Battery Pack  
(1,400 mAh)



**KNB-29N**  
Ni-MH Battery Pack  
(1,500mAh)



**KSC-31**  
Charger for  
KNB-53N/29N



**KSC-35**  
Rapid Charger  
for KNB-45L



**KSC-316/356**  
6 Pocket Multiple Charger



**KMB-25**  
6 Unit Charger Adapter  
(chargers not included)



**KRA-22/23**  
VHF/UHF Low Profile  
Helical Antenna



**KRA-26/27**  
VHF/UHF Whip Antenna



**KRA-16/17**  
VHF/UHF Stubby Antenna



**KMC-45**  
Speaker Microphone



**KMC-21**  
Compact Speaker  
Microphone



**KHS-1**  
Headset  
with VOX/PTT



**KHS-7/7A**  
Single-Muff Headset



**KHS-8BL/BE**  
2-Wire Palm Microphone  
(Black/Beige)



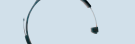
**KHS-9BL/BE**  
3-Wire Lapel Microphone  
with Earphone (Black/Beige)



**KHS-10-BH/-OH**  
Noise-Reduction Headset  
with Noise-Cancelling  
Microphone



**KHS-21**  
Headset



**KHS-23**  
2-Wire Palm  
Microphone



**KHS-25**  
Headset with D-Ring Ear  
Hanger & Boom Mic./PTT



**KHS-26**  
Clip Microphone  
with Earphone



**KHS-27**  
Headset with Ear Hanger



**KEP-2**  
Earphone Kit  
(2.5 mm plug)



**KWR-1**  
Water Resistant Bag



**KBH-10**  
Belt Clip



All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

## Specifications

	TK-2312	TK-3312
<b>GENERAL</b>		
Frequency Range		
Type 1	136 - 174 MHz	450 - 520 MHz
Type 2	—	400 - 470 MHz
Number of Channels / Zones		128 / 128
Channel Spacing		
Wide / Narrow		25 / 12.5 kHz
Operating Voltage	7.5 V DC $\pm 20\%$	
Battery Life (5-5-90 duty cycle, save off/on)		
with KNB-45L (2000 mAh)	Approx. 12 hours	Approx. 18 hours
with KNB-53N (1400 mAh)	Approx. 9 hours	Approx. 12 hours
with KNB-29N (1500 mAh)	Approx. 10 hours	Approx. 14 hours
Operating Temperature Range	-30°C ~ +60°C	
Frequency Stability	$\pm 2.5$ ppm (-30°C ~ +60°C)	
Antenna Impedance	50 $\Omega$	
Channel Frequency Spread	38 MHz	70 MHz
Dimensions (W x H x D), Projections not included		
Radio only	2.13" x 4.8" x 0.83" (54 x 122 x 21 mm)	
with KNB-45L	2.13" x 4.8" x 1.33" (54 x 122 x 33.7mm)	
with KNB-53N	2.13" x 4.8" x 1.33" (54 x 122 x 33.7mm)	
with KNB-29N	2.13" x 4.8" x 1.33" (54 x 122 x 33.7mm)	
Weight (net)		
Radio only	6.35 oz (180g)	
with KNB-45L	10.58 oz (300g)	
with KNB-53N	13.4 oz (380g)	
with KNB-29N	13.4 oz (380g)	
FCC ID		
Type 1	ALH413700	ALH413800
Type 2	—	ALH413801
FCC Compliance	Parts 22 / 74 / 90	Parts 22 / 74 / 90

	TK-2312	TK-3312
<b>RECEIVER</b>		
Sensitivity (12 dB SINAD)		
Wide / Narrow		0.25 $\mu$ V / 0.28 $\mu$ V
Adjacent Channel Selectivity		
Wide / Narrow		70 dB / 60 dB
Intermodulation Distortion		
Wide / Narrow		65 dB / 60 dB
Spurious Response Rejection	65 dB	60 dB
Audio Distortion		Less than 5 %
Audio Output		500 mW / 8 $\Omega$
<b>TRANSMITTER</b>		
RF Output Power (High / Low)	5 W / 1 W	
Modulation Limiting	$\pm 5.0$ kHz at 25 kHz	
	$\pm 2.5$ kHz at 12.5 kHz	
Spurious Response	65 dB	
FM Noise (EIA)		
Wide / Narrow	45 dB / 40 dB	
Modulation Distortion	Less than 5 %	
Microphone Impedance	2 k $\Omega$	
Modulation		
Wide / Narrow	16K0F3E / 11K0F3E	

Measurements made per TIA/EIA 603 and specifications shown are typical. Kenwood follows a policy of continuous advancement in development. For this reason specifications may be changed without notice. FleetSync® is a registered trademark of Kenwood Corporation.

## Applicable MIL-STD & IP

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I
Rain	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV
<b>International Protection Standard</b>				
Dust & Water Protection	IP54			
	IP55			

## Listen to the Future

Kenwood has always connected with people through sound. Now we want to expand the world of sound in ways that only Kenwood can, listening to our customers and to the pulse of the coming age as we head toward a future of shared discovery, inspiration and enjoyment.

### Kenwood U.S.A. Corporation

Communications Division Headquarters

3970 Johns Creek Court, Ste. 100 Suwanee, GA 30024, U.S.A

### Kenwood Electronics Canada Inc.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8



ISO9001 Registered  
Communications Equipment Division  
Kenwood Corporation